CLAIM AMENDMENTS

1. (Currently Amended) A sensor assembly, comprising:

a number of sensor elements exhibiting a first coefficient of thermal expansion; and

an encapsulant covering said number of sensor elements, said encapsulant comprising a curable adhesive doped with an additive, such that said encapsulate exhibits ~~exhibiting~~ a second coefficient of thermal expansion approximately equal to said first coefficient of thermal expansion

2. (Cancelled) The sensor assembly of claim 1, wherein said encapsulant comprises a curable adhesive.

3. (Cancelled) The sensor assembly of claim 2, wherein said curable adhesive is doped with an additive, such that said first coefficient of thermal expansion is substantially equal to said second coefficient of thermal expansion.

4. (Currently Amended) The sensor assembly of claim ~~2~~ 1, wherein said additive exhibits a third coefficient of thermal expansion lower than said first coefficient of thermal expansion.

5. (Currently Amended) The sensor assembly of claim ~~2~~ 1, wherein said additive comprises a ceramic material.

6. (Currently Amended) The sensor assembly of claim ~~2~~ 1, wherein said additive comprises a material selected from the group consisting of Aluminum Oxide, Magnesium Oxide, and Silicon Oxide.

7. (Original) The sensor assembly of claim 1, wherein said number of sensor elements comprises metallic material.

8. (Original) The sensor assembly of claim 1, wherein said number of sensor elements comprises a respective number of copper coils.

9. (Original) The sensor assembly of claim 1, wherein said number of sensor elements comprises a plurality of sensor elements.

10. (Original) The sensor assembly of claim 1, wherein said number of sensor elements comprises a plurality of sensor elements, and said encapsulant covers said plurality of sensor elements to form an integral sensor assembly.

11. (Original) The sensor assembly of claim 1, wherein said number of sensor elements is configured to provide location data for medical procedures.

12. (Original) The sensor assembly of claim 1, wherein said sensor assembly is configured for installation on a catheter.

13. (Original) A sensor assembly, comprising:

a number of sensor elements exhibiting a first coefficient of thermal expansion; and

an encapsulant covering said number of sensor elements, said encapsulant comprising a curable adhesive and an additive, wherein said curable adhesive exhibits a second coefficient of thermal expansion greater than said first coefficient of thermal expansion, and said additive exhibits a third coefficient of thermal expansion less than said first coefficient of thermal expansion.

14. (Original) The sensor assembly of claim 13, wherein said additive comprises a ceramic material.

15. (Original) The sensor assembly of claim 13, wherein said additive comprises a material selected from the group consisting of Aluminum Oxide, Magnesium Oxide, and Silicon Oxide.

16. (Original) The sensor assembly of claim 13, wherein said number of sensor elements comprises metallic material.

17. (Original) The sensor assembly of claim 13, wherein said number of sensor elements comprises a respective number of copper coils.

18. (Original) The sensor assembly of claim 13, wherein said number of sensor elements comprises a plurality of sensor elements.

19. (Original) The sensor assembly of claim 13, wherein said number of sensor elements comprises a plurality of sensor elements, and said encapsulant covers said plurality of sensor elements to form an integral sensor assembly.

20. (Original) The sensor assembly of claim 13, wherein said number of sensor elements is configured to provide location data for medical procedures.

21. (Original) The sensor assembly of claim 13, wherein said sensor assembly is configured for installation on a catheter.

22. (Currently Amended) A medical sensor assembly, comprising:

a number of sensor elements configured to provide location data for medical procedures, wherein said number of sensor elements exhibits a first coefficient of thermal expansion; and

an encapsulant covering said number of sensor elements, said encapsulant comprising a curable adhesive and an additive, wherein said curable adhesive exhibits a second coefficient of thermal expansion greater than said first coefficient of thermal expansion, and said additive exhibits a third coefficient of thermal expansion less than said first coefficient of thermal expansion.

23. (Cancelled) The medical sensor assembly of claim 22, wherein said number of sensor elements exhibits a first coefficient of thermal expansion, said curable adhesive exhibits a second coefficient of thermal expansion greater than said first coefficient of thermal expansion, and said additive exhibits a third coefficient of thermal expansion less than said first coefficient of thermal expansion.

24. (Original) The medical sensor assembly of claim 22, wherein said additive comprises a ceramic material.

25. (Original) The medical sensor assembly of claim 22, wherein said additive comprises a material selected from the group consisting of Aluminum Oxide, Magnesium Oxide, and Silicon Oxide.

26. (Cancelled) The medical sensor assembly of claim 22, wherein said number of sensor elements exhibits a first coefficient of thermal expansion, said curable adhesive exhibits a second coefficient of thermal expansion greater than said first coefficient of thermal expansion, and said additive exhibits a third coefficient of thermal expansion between said first and second coefficients of thermal expansion.

27. (Original) The medical sensor assembly of claim 22, wherein said additive comprises microspheres.

28. (Original) The medical sensor assembly of claim 22, wherein said number of sensor elements comprises metallic material.

29. (Original) The medical sensor assembly of claim 22, wherein said number of sensor elements comprises a respective number of copper coils.

30. (Original) The medical sensor assembly of claim 22, wherein said number of sensor elements comprises a plurality of sensor elements.

31. (Original) The medical sensor assembly of claim 22, wherein said number of sensor elements comprises a plurality of sensor elements, and said encapsulant covers said plurality of sensor elements to form an integral sensor assembly.

32. (Original) The medical sensor assembly of claim 22, wherein said sensor assembly is configured for installation on a catheter.

33. (Cancelled) A method of making a sensor assembly, comprising: selecting a number of sensor elements that exhibit a first coefficient of thermal expansion; selecting an encapsulant having

a second coefficient of thermal expansion based on said first coefficient of thermal expansion; and covering said number of sensor elements with said encapsulant.

34. (Cancelled) The method of claim 33, wherein said first coefficient of thermal expansion is approximately equal to said second coefficient of thermal expansion.

35. (Cancelled) The method of claim 33, further comprising forming said encapsulant by: selecting an adhesive that exhibits a third coefficient of thermal expansion different from said first coefficient of thermal expansion; selecting a quantity of additive that exhibits a fourth coefficient of thermal expansion, such that a combination of said adhesive and said additive exhibits said second coefficient of thermal expansion; and doping said adhesive with said additive.

36. (Cancelled) The method of claim 35, wherein said third coefficient of thermal expansion is greater than said first coefficient of thermal expansion, and said fourth coefficient of thermal expansion is less than said first coefficient of thermal expansion.

37. (Cancelled) The method of claim 35, wherein said additive comprises a ceramic material.

38. (Cancelled) The method of claim 35, wherein said additive comprises a material selected from the group consisting of Aluminum Oxide, Magnesium Oxide, and Silicon Oxide.

39. (Cancelled) The method of claim 35, wherein said third coefficient of thermal expansion is greater than said first coefficient of thermal expansion, and said fourth coefficient of thermal expansion is between said first and coefficients of thermal expansion.

39. (Cancelled) The method of claim 35, wherein said additive comprises microspheres.

40. (Cancelled) The method of claim 33, wherein said number of sensor elements comprises metallic material.

41. (Cancelled) The method of claim 33, further comprising arranging said number of sensor elements to provide location data for medical procedures.

42. (Cancelled) The method of claim 33, wherein said number of sensor elements comprises a plurality of sensor elements.

43. (Cancelled) The method of claim 33, wherein said number of sensor elements comprises a plurality of sensor elements, said method further comprising covering the plurality of sensor elements to form an integral assembly.

44. (Newly Added) A medical sensor assembly, comprising:

a number of sensor elements configured to provide location data for medical procedures, wherein said number of sensor elements exhibits a first coefficient of thermal expansion; and

an encapsulant covering said number of sensor elements, said encapsulant comprising a curable adhesive and an additive, wherein said curable adhesive exhibits a second coefficient of thermal expansion greater than said first coefficient of thermal expansion, and said additive exhibits a third coefficient of thermal expansion between said first and second coefficients of thermal expansion.

45. (Newly Added) The medical sensor assembly of claim 44, wherein said additive comprises a ceramic material.

46. (Newly Added) The medical sensor assembly of claim 44, wherein said additive comprises a material selected from the group consisting of Aluminum Oxide, Magnesium Oxide, and Silicon Oxide.

47. (Newly Added) The medical sensor assembly of claim 44, wherein said additive comprises microspheres.

48. (Newly Added) The medical sensor assembly of claim 44, wherein said number of sensor elements comprises metallic material.

49. (Newly Added) The medical sensor assembly of claim 44, wherein said number of sensor elements comprises a respective number of copper coils.

50. (Newly Added) The medical sensor assembly of claim 44, wherein said number of sensor elements comprises a plurality of sensor elements.

51. (Newly Added) The medical sensor assembly of claim 44, wherein said number of sensor elements comprises a plurality of sensor elements, and said encapsulant covers said plurality of sensor elements to form an integral sensor assembly.

52. (Newly Added) The medical sensor assembly of claim 44, wherein said sensor assembly is configured for installation on a catheter.